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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,247	09/22/2003	Robert Arwood	1303 US	9507

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KEY SAFETY SYSTEMS, INC.
PATENT DEPARTMENT
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EXAMINER	
ROSENBERG, LAURA B	

ART UNIT	PAPER NUMBER
3616	

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,247	ARWOOD ET AL.	
	Examiner	Art Unit	
	Laura B Rosenberg	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 22 September 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1/9/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7-14, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Schneider (6,431,583). As best understood, Schneider discloses a knee bolster assembly (#10) for a vehicle comprising:

- Air bag (#22) having an inflated condition (best seen in figure 7) and a "deflated" condition (best seen in figure 6)
- Air bag inflator (#54)
- Knee contact plate (#28, 29) having an actuated position (best seen in figure 7) and an unactuated position (best seen in figure 6)
- Guide structure (including #48, 50, 52) attached to the knee contact plate (at #60 and able to direct the knee contact plate along a generally liner path from the unactuated position to the actuated position (column 8, lines 7-16; best seen in figure 7)
- Air bag housing (#26)
- Air bag has a rear area disposed closer to the air bag housing when inflated and a front area where the knee contact plate is disposed (best seen in figure 7)

- Guide structure directs the knee contact plate to an anticipated location of a knee (part of #13) of a vehicle occupant (#12)
- Guide structure comprises a first member (including #48, 50 within #60) and a second member (including #48, 50 within #61), the first member able to extend from the unactuated position to the actuated position along the generally linear path relative to the second member (best seen in figures 6, 7)
- Tether (#30) attaching airbag to knee contact plate
- Knee contact plate comprises a cushion (#29)
- Guide structure is able to expand (best seen in figure 7) and is able to retract between the actuated position and the unactuated position

The method of claim 20 reads on the apparatus described above.

3. Claims 1-3, 7-9, 11-14, 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Lang et al. (5,536,043). As best understood, Lang et al. disclose a knee bolster assembly (#20) for a vehicle comprising:

- Air bag (#26) having an inflated condition (can be seen in figure 3) and a "deflated" condition (best seen in solid lines in figure 2)
- Air bag inflator (#24)
- Knee contact plate (#28) having an actuated position (can be seen in dotted lines in figure 2) and an unactuated position (can be seen in solid lines in figure 2)

- Guide structure (including #50) attached to the knee contact plate (via #52) and able to direct the knee contact plate along a generally liner path (deployment path in figure 5) from the unactuated position to the actuated position (best seen in figure 5)
- Air bag housing (#22)
- Air bag has a rear area disposed closer to the air bag housing when inflated and a front area where the knee contact plate is disposed (best seen in figures 3, 5)
- Guide structure directs the knee contact plate to an anticipated location of a knee (#32) of a vehicle occupant (best seen in figure 2)
- Guide structure comprises a first member (including #52) and a second member (including #42), the first member able to extend from the unactuated position to the actuated position along the generally linear path relative to the second member (best seen in figure 5)
- Tether (#46, 48) attaching airbag to knee contact plate
- Guide structure is able to expand (best seen in figure 5) and is able to retract between the actuated position and the unactuated position

The method of claim 20 reads on the apparatus described above.

4. Claims 1-8, 10-16, and 18-20 rejected under 35 U.S.C. 102(b) as being anticipated by Keeler et al. (5,344,184). As best understood, Keeler et al. disclose a knee bolster assembly (#10) for a vehicle comprising:

- Air bag (#42) having an inflated condition (best seen in figures 2, 4) and a "deflated" condition (best seen in figures 1, 3)

- Air bag inflator (#44)
- Knee contact plate (including #36) having an actuated position (best seen in figures 2, 4) and an unactuated position (best seen in figures 1, 3)
- Guide structure (#110, 116) attached to the knee contact plate (via #124, 126, 128) and able to direct the knee contact plate along a generally liner path from the unactuated position to the actuated position (best seen in figures 1-5)
- Guide structure directs the knee contact plate to an anticipated location of a knee of a vehicle occupant (best seen in figures 2, 4)
- Guide structure comprises a first member (including #122, 152) disposed within a second member (including #150), the first member able to extend from the unactuated position to the actuated position along the generally linear path relative to the second member (best seen in figure 5)
- First member comprises a guide "pin" (including #122, 152) having a first tapered surface (shoulders of #152 that face upwards in figure 5)
- Second member comprises a guide tube (including #150) having a second tapered surface (near #153)
- First tapered surface mating with the second tapered surface in the actuated position (best seen in dotted lines in figure 5)
- Air bag housing (including #20, 96, 98,100, 102)
- Air bag has a rear area disposed closer to the air bag housing when inflated and a front area where the knee contact plate is disposed (best seen in figures 2, 4)
- Knee contact plate comprises a cushion (#36; column 3, line 40)

- Guide structure is able to expand and is able to retract between the actuated position and the unactuated position (best seen in figures 1-5)

The method of claim 20 reads on the apparatus described above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-8, 11-16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meduvsky et al. (6,846,015) in view of Schneider (6,431,583). As best understood, Meduvsky et al. disclose a knee bolster assembly (#10) for a vehicle (#12) comprising:

- Air bag (inflatable portion not shown; column 3, lines 30-35)
- Knee contact plate (#20) having an actuated position (best seen in figure 2) and an unactuated position (best seen in figure 1)
- Guide structure (#80, 80a, 80b, 80c, 80d) attached to the knee contact plate (at #126, 128) and able to direct the knee contact plate along a generally liner patch from the unactuated position to the actuated position (in direction of arrow #160)
- Guide structure directs the knee contact plate to an anticipated location of a knee (part of #26) of a vehicle occupant (#28)

- Guide structure comprises a first member (including #120, 122) disposed within a second member (including #92), the first member able to extend from the unactuated position to the actuated position along the generally linear path relative to the second member (best seen in figures 3, 4)
- First member comprises a guide "pin" (including #120, 122) having a first tapered surface (shoulders of #120 that face #124)
- Second member comprises a guide tube (including #90, 92) having a second tapered surface (near #138)
- First tapered surface mating with the second tapered surface in the actuated position (best seen in figure 4)
- Guide structure is able to expand (along arrow #160) and is able to retract (along arrow #162) between the actuated position and the unactuated position

The examiner notes that while one embodiment (#80) of the guide structure was used for reference, other embodiments include similar features that also read on the claims.

Meduvsky et al. do not disclose the specifics of the air bag, such as the inflator. Schneider teaches a knee bolster assembly (#10) for a vehicle comprising an air bag (#22) having an inflated condition (best seen in figure 7) and a "deflated" condition (best seen in figure 6), an air bag inflator (#54), a knee contact plate (#28, 29) having an actuated position (best seen in figure 7) and an unactuated position (best seen in figure 6), and an air bag housing (#26), the air bag having a rear area disposed closer to the air bag housing when inflated and a front area where the knee contact plate is disposed (best seen in figure 7). It would have been obvious to one skilled in the art at the time

that the invention was made to modify the knee bolster assembly of Meduvsky et al. such that it comprised an airbag, airbag inflator, airbag housing, and a front and rear configuration as claimed in view of the teachings of Schneider so as to provide an additional cushioning when the knee bolster system is deployed, means for deploying the air bag in the event of an accident, and a container to hold the uninflated air bag and to maintain connection between the inflated air bag and the instrument panel (Schneider: columns 5-6).

The method of claim 20 reads on the apparatus described above.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kob et al. and Adomeit et al. each disclose a knee bolster assembly comprising an airbag, a knee bolster with a cushion, and a guide mechanism.

Schneider et al. disclose a knee bolster assembly comprising an airbag and a knee bolster with a cushion.

Sutherland and Feldman each disclose a knee bolster assembly comprising an airbag, a knee bolster with a cushion, and a tether.

Unger et al. disclose a knee bolster assembly comprising an airbag, a knee bolster with a cushion, a tether, and a guide mechanism.

Schneider discloses a knee bolster assembly comprising an airbag, a knee bolster with a cushion, a tether/ guide mechanism.

Wang et al. and Shimose each disclose a knee bolster assembly comprising a knee bolster and a guide mechanism.

Murakami and Ros et al. each discloses a knee bolster assembly comprising a knee bolster, a tether, and a guide mechanism.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B Rosenberg whose telephone number is (703) 305-3135. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beginning April 7, 2005, Laura B Rosenberg can be reached at the new USPTO location at (571) 272-6674, and Paul Dickson can be reached at (571) 272-6669.

Laura B. Rosenberg
Laura B Rosenberg
Patent Examiner
Art Unit 3616

LBR

3/21/05
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